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Strategy focused schools: an implementation of the balanced scorecard in provision of educational services

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Abstract

The main mission of the educational institutions is to provide benefit and create the social values for the society. In order to ensure educational institutions to deliver their main mission, they should measure whether they have achieved their strategic objectives or not. While most of the main objectives of the businesses are financial such as maximizing the profits, however educational institutions' prior performance objectives are not financial ones. Therefore, the performance management of the high schools as an educational institution should be based on nonfinancial performance perspectives. By bringing a comprehensive system to performance measurement, the balanced scorecard (BSC) may help educational institutions to motivate and evaluate the organizational performance. The BSC may be a suitable model to be used in public and non-profit organizations by defining the links between leading inputs, processes, and outcomes and focusing on the importance of managing these components to achieve the organization's strategic priorities. While the implementation of the balanced scorecard (BSC) in the different sectors is frequently seen in the literature, very few researches has been conducted concerning the application of the BSC in the education sector. In this study we will develop a BSC model for the high school in Turkey. First we will review the administrative structures, functions and the operations and the current performance measurement systems of the high schools. Later in the study we develop the perspectives of the school balanced scorecard and we define strategic objectives, performance measures relating to these objectives, performance targets for each measure and initiatives. In the study, we suggest that if high schools use the balanced scorecard as a strategic performance management system it may help them to be strategy focused and may better serve their missions.

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1. Introduction

Education is a vital fact that increases knowledge which is an essential feature that enhances the qualifications of people and therefore it plays a critical role in shaping the future of the nations. It is well known that education is an important factor at accelerating economic, cultural and social development in a country. As competition in educational services has become more intense, many educational institutions invested in education in order to achieve their goals. In order to ensure educational institutions to deliver their main mission, they should measure whether they have achieved their strategic objectives or not.

Education has been related with the process of instructing young people in ways which form the mind and character necessary to become good citizens and employable workers to increase the development of a country. Nowadays, education has become a life-long process, increasingly connected to schooling, human and economic development, and productivity by enhancing personal and national welfare. During the past 50 years, development of educational services has contributed to a fundamental conversion of OECD countries, including Turkey (Owings, Kaplan and Pirim, 2012). As a developing country, Turkey accepts education as a crucial component in constructing its economy to world class levels.

The purpose of this study is to increase understanding of how the BSC is used in educational institutions. This paper is organized in the following manner. First we will review the purpose of educational services as private and governmental sector. Then strategic planning in education is presented. Later in the study we develop the perspectives of the school balanced scorecard and we define strategic objectives, performance measures relating to these objectives, performance targets for each measure and initiatives.

2. Educational Services

The purpose of education is to improve the welfare of the individual and the society by promoting civilized, progressive, competent and efficient development of the individual and the society in a given country. Nowadays in developed countries, the priority of educational services is one of the main features that determine level of development. Besides education provides special benefits to people, it also creates positive externalities to the society that increases the social development of a country. The developments in all fields of life increase the importance of education. Thus concentration of many efforts in the provision of this service by government and private sector become prominent.

There are different perspectives on the outcomes of the education process. One view states that education increases the skills of individuals and thus contributes all kind of development. This perspective perceives investment in people as capital investments. The greater is the investment of human capital, the greater is the productivity. Another view is about the socialization role of education. It teaches people how to perform well in public, work and home. In this perspective, there is a positive relation between education period and social skills of individuals. These social abilities make people more valuable in the life. Another function of education is to identify the abilities of different individuals. Those who attend to school longer than the others get higher wage and are observed to be more productive. This is not because the schools have increased their productivity, but rather because the schools have identified those individual who are the most productive, or who have the necessary ability or skill. This view indicates schooling as separating the very able and highly motivated from the less ones (Stiglitz, 1999).

3. Strategic Planning in Education

Public and private educational institutions are experiencing challenges such as increased competition, emerging technology, scarcity of resources or inefficient resource allocation. Because of globalization trend and knowledge-based era all these challenges become more important. The increasing volatility of the environment has forced institutions to adapt to ever changing external circumstances (Machado and Taylor, 2010). The literature strongly recommends strategic planning as the key to superior performance. According to the mission

and vision of the educational institutions managers should apply administrative and managerial strategies to achieve the institutions' goals.

Planning is a way of looking toward the future and deciding what the organization will do in the future. Strategic planning is a disciplined effort to produce decisions and actions that guide and shape what the organization is, what it does, and why it does it (Bryson, 1995).

Pfeiffer *et al.* (1986) defined strategic planning as, “the process by which members of an organization envision its future and develop the necessary procedures and operations to achieve that future.” Another definition in the literature that is often used to explain what strategic planning is made by Barry (1997) and he states that it is “*what* an organization intends to achieve and, secondly, *how* leadership within an organization will direct or utilize its resources to achieve its ends”.

Figure 1 shows the process of in an uncomplicated view. Bryson (2004) provides a simple structure for the strategic planning process by defining the ABC's of strategic planning. According to Bryson, A is where you are, B is where you want to be and C is how you get there. The vision, mission, and goals of the organization help it move from A to B. Strategy formulation connects A to C and strategy implementation connects B to C.



Fig. 1. ABC's of Strategic Planning

Source: Bryson, J.M. (2004). Strategic planning for public and nonprofit organizations: a guide to strengthening and sustaining organizational achievement (3rd ed.). San Francisco: JosseyBass, p.11.

In short, strategic planning indicates the path managers will take to achieve the mission and the vision of their institution. Strategic actions will guide managers to achieve their institutions' goals by providing strategic direction, allocating and concentrating their resources –human, financial, and material-, establishing shared

values, coping with uncertainty and indicating success and failure. As a result of this process, institutions will have a clearer idea of what it is, what it does, and what challenges it faces. Following strategic plans will also help the institutions to get enhanced performance and responsiveness to its environment.

It can be thought that strategic planning process is an issue of business sector because for many years business and education have been regarded as two separate areas that act completely different. But there are considerable common points between the activities of a school and the activities of any other organization.

As far as the similarities are concerned, the main task of both business and education is to make a profit. One could argue that their profit is different, but what matters is that in one way or another they both seek to achieve something. Their resources are always limited, since there is a scarcity and they are constantly trying to obtain more for themselves. In contrast, their needs are usually unlimited and they are trying to satisfy as many as possible (Tsiakkios & Pashiardis, 2002).

The concept strategy is used widely for over 10-15 years in the education system and educational institutions and especially with implementing number of actions related to planning more efficiently. There is also a wide use of the word strategy together with planning in the literature. According to the literature if the planning is not strategic, it is not accepted as a plan. Strategic planning's advantages is seen as a path for schools that transmit them to the future (Ensari, 2005).

School managers should take more initiatives in order to fit to the rapidly changing environmental circumstances. Strategic planning helps to cope with this problem by presenting a functional model. In this way managers can be more effective and make their schools adaptive to the changing environment (Erdoğan, 2000).

4. Education and Performance Measurement

Performance management is a means of auditing and managing the organizations' overall activity. Organizations are encouraged to raise their levels of performance, and manage their staff and customers more tightly to achieve better outputs and outcomes. The transformation of industrial era into the information age has improved the importance of educational services. This change has placed education in a central position in the development of countries. In the sight of globalization, managers need to cope with changing environments and technology. In order to compete with the others all institutions have to provide these services successfully, the managers of the educational institutions carefully design the activities and processes, organize and implement the planned activities, and conduct the supervision and controls on the operations. The most important activity of control functions of the management is the performance measurement and management, which are among the main tasks of the managers. Managers may set up a performance management system for the entire institution as a systematic system or just for a specific activity or for a business unit. In some cases performance measurement can be done just for a specific purpose.

Performance measurement results of an activity to determine the extent to achieve observance. The performance measurement is not only a data collection process but rather it is a process to improve effectiveness and efficiency of operations. The performance measurement is an important process for decision-makers in any type of organization. However, it is not sufficient just to measure the performance of the activities. Managers should also make the decisions based on performance results and implement corrective actions according to the results (Coşkun and Şenyiğit, 2010).

Performance indicators should be rigorous chosen. According to Markless and Streatfield (2001) good performance indicators should be:

- Relevant to accepted organizational goals.
- Informative (giving warning signs, identifying achievements etc.).
- Able to be changed.
- Reliable.

- Valid
- Accessible/understandable.
- Acceptable (seen to be fair; checkable).
- Not corruptible.
- Cost-effective.

The use of indicators of performance as a way of managing and improving performance in education is now so widespread across schools, colleges and universities that it is difficult to imagine educational life without them. Educational institutions operate in both the private sector and the public sector. The main objective of the educational institutions in the private sector is to increase profitability and the value of the institution, or to ensure the continuity of business as determined in accordance with the basic aim is scheduled. Managers of educational institutions in the public sector aim to achieve the goals and objectives determined by the law and improve the general education level of the society. Therefore, in the performance management of the public educational institutions, non-financial factors such as satisfaction of the customer (student) and other stakeholders and service quality are more important than the financial objectives. However, the financial aspect of business continuity is also important in the evaluation of the performance of public enterprises (Coskun, 2009).

Performance measurement systems in educational institutions can be either based on financial or nonfinancial performance. Financial statements analysis, standard costing and budget analysis are the examples of financial performance measurement. Managers of the educational institutions can also implement nonfinancial approaches of the performance measurement such as measuring the service quality, productivity, efficiency and effectiveness, and customer satisfaction. As a contemporary approach in performance measurement and management, the balanced scorecard (BSC) provides a comprehensive set of financial and nonfinancial performance measures for the organizations to be strategy focused. Reliance only on financial performance measures may not show future competitive advantage as financial indicators are outcome measures (Chia et al., 2009). Without measuring results, there is no way of knowing whether the business is being managed satisfactorily, nor is it possible to hold managers accountable for the business. Moreover, it is not easy to determine what kind of successes should be rewarded. Even though so far there have been numerous tools developed for the purpose of performance measurement; the BSC differs by putting the organization's vision and strategy into a framework effectively and communicating the strategic intent efficiently.

5. Concept of the Balanced Scorecard

The Balanced Scorecard is a management tool that was developed by Kaplan and Norton in the 1990s (Kaplan and Norton, 1992; 1993; 1996a; 1996b; 2000, 2001). Kaplan and Norton recognized the need for businesses to have a more "balanced" approach of assessing company performance than the traditional method of looking strictly at financial data (Davis, 2005).

Kaplan and Norton (1996a) list the following uses of the BSC:

- To clarify and update strategy
- To communicate strategy in the company
- To align unit and individual goals to strategy
- To link objectives to long term targets and budgets
- To conduct performance reviews to improve strategy

Since the new economy has new concepts such as process orientation, continuous improvement, competence and knowledge, customer focus, and operational efficiency, it generates challenges for measurement of data (Gumbus et al., 2003). While financial data is important, in large part, it only gives an indication of historical

company performance. The BSC combines financial data along with non-financial performance criteria, such as product quality and customer service, in a way that allows businesses to not only track their performance, but also to align business activities in such a way that they support the organization's stated missions and goals (Davis, 2005). The BSC system has flexible structure. It is important to take into account the specific needs of the institution and the industry in which it competes when creating the BSC (Olson and Slater, 2002).

Mainly there are four stages of the BSC design and implementation for most type of organizations (Kaplan and Norton, 1996a): Translating the vision, communicating and linking, business planning, and feedback and learning.

The BSC provides superior financial performance when compared to a traditional performance measurement system (Albright and Davis, 2004). In contrast to the financial based measurement systems, the BSC reinforces the organization's focus on future success by setting objectives and measuring performance from different perspectives. 'Balance' is expected to be assured by short and long-term financial and nonfinancial and leading indicators, concerning four perspectives (Ahn, 2001). These balanced perspectives in the Kaplan and Norton's first BSC are the financial perspective, customer perspective, internal business processes perspective, and learning and growth perspective (Kaplan and Norton, 1992). The BSC retains the financial measurement, but it focuses on a more general and integrated set of measurements that link customer, internal business processes, employee learning and growth, and financial performance to long-term financial success.

These four perspectives are defined as (Griffith et al., 2002):

- Financial Perspective – performance and resource management (related to investors' interests)
- Internal Business Processes Perspective – cost, quality, efficiency and other characteristics of goods or services (related to internal processes)
- Customer Perspective – measures of satisfaction, market share and competitive position (related to customers' needs)
- Learning and Growth Perspective – ability to respond to changes in technology, customer attitudes and economic environment (related to constant improvement concerning employee qualification and information management)

For each perspective of the BSC, strategic objectives, performance measures relating to these objectives, performance targets for each measure and initiatives are defined. Performance measures in a scorecard should be linked to each other and to the long term vision and strategy, following a cause and effect relationship (Coskun and Bayyurt, 2008). This cause and effect relationship clearly explained in the BSC strategy maps. A BSC strategy map is a generic architecture for describing the strategy and shows the cause and effect relationship between the perspectives (Kaplan and Norton, 2001).

The BSC assists companies in overcoming two important issues: effective organizational performance measurement and implementing strategy (Niven, 2002). The first issue is an effective performance measurement: "If you cannot measure it, you cannot manage it". Traditionally, the performance measurement system for business has been financial. A key problem with looking at financial or accounting-based measures alone is that it gives only one particular perspective. In fact, it may even lead to poor decision-making. For example, if the cost per customer is one of the main performance measures managers may try to cut costs without taking care of customer satisfaction and this may result dissatisfied customers because of the lower quality products and services. Implementing a strategy successfully is another important issue facing organizations. A strategy is a set of hypotheses about cause and effect. The measurement system makes the relationships (hypotheses) among objectives in the various perspectives explicit so that they can be managed and validated (Niven, 2002).

The BSC is not merely a collection of financial and non-financial measurements. The BSC should be the translation of the business unit's strategy into a linked set of measures that define both the long-term strategic purposes, as well as the mechanisms for achieving those purposes (Kaplan and Norton, 2000). In the nature of implementing strategies, the organization may have some barriers. There are four barriers to strategy

implementation that exist for most companies: a vision barrier, a people barrier, a resource barrier, and a management barrier. The managers can remove these barriers by implementing the BSC (Niven, 2002).

There are also some requirements for an effective and efficient implementation of the BSC (Mearns and Havold, 2003):

- The organization has to know where it would like to go and how it will get there.
- The organization must understand that the scorecard is a long-term exercise. It is a tool for implementing business strategy.
- Management must have the maturity to use the results of the scorecard for continual improvement and not look for faults in the measures if they see something they do not like.
- The BSC must reach down the organizational structure and back up again. It is a tool for departments as well as senior management, and the scorecards throughout the organization must be linked together.
- Parameters must be objective and the data gathering process should be transparent to people using the information or being measured.
- It is unrealistic and de-motivating to measure people on things they cannot control.

6. Balanced Scorecard for Educational Institutions

The BSC is not only better in monitoring and evaluating performance of an educational institution but also in improving the performance to its best level. For instance, by tracking value delivery and paying incentives to staff based on how much value an organization delivers to customers, rather than the amount or value received from customers, educational institutions can motivate and redirect staff to look for better ways to improve value of service. This can serve as counter to the possibility of staff motivation to promote short-term importance on the revenue received from clients. Also by effectively tracking improvement made by students, families and community, BSC can give internal stakeholders such as teaching staff and employees a renewed pride in what they do (MacStravic, 1999).

The original BSC of the Kaplan and Norton (1996a) has financial, customer, internal process, and learning and growth perspectives, but educational institutions may modify these four perspectives in their scorecards or add some other perspectives. We slightly changed the original scorecard and used four perspectives in the Balanced Scorecard for Educational Services: stakeholders, internal processes, learning and growth, and financial sustainability perspectives

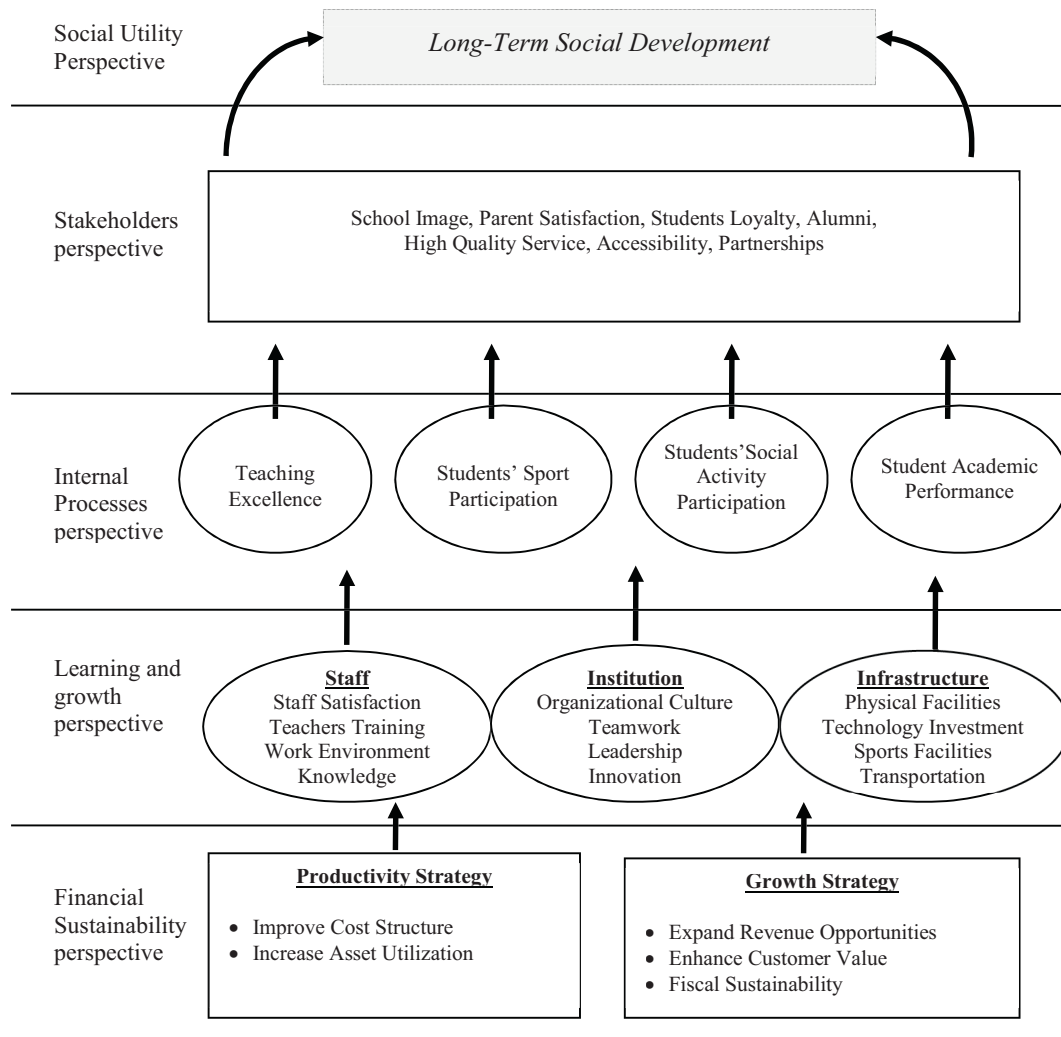


Fig. 2: Strategy Maps for Educational Services

In each perspective of the balanced scorecard for educational services there are related strategic objectives and certain number of performance measures to evaluate the achievement to these objectives. Performance targets for each performance measure are determined and achieved results are gathered end of each period. Depending on characteristics of the institutions and the strategic objectives performance measures may differ.

We developed a Balanced Scorecard for Educational Services in Table 1. Later we defined the strategic objectives in each perspective. Finally we determined the performance measures to evaluate the achievement of each strategic objective. There are three strategic objectives in financial sustainability perspective of the balanced scorecard for educational services: improve cost structure, increase asset utilization expand revenue opportunities. Four performance measures can be used to evaluate these strategic objectives: Saving in cost of service, efficient use of facilities and resources, level of student enrollment fund raising from stakeholders. In the second perspective, learning and growth perspective; improve staff satisfaction, Technology implementation and Knowledge enhancement are the three strategic objectives which are measured at the balanced scorecard for educational services. Internal processes perspective is listed with improving the student academic performance,

to achieve improvement in teaching excellence, increase students participation to sport activities and increase in students participation to social activities are the four strategic objectives. Educational institutions can achieve these targets by measuring exam results of students, budget spent on staff development, number of students attending the sport activities, number of social activities as performance indicators. Finally, in stakeholders perspective of the balanced scorecard for educational services we determine objectives based on three different aspects. Students, parents and other related institutions. These objectives can be measured by reputation ratio,, external rankings, alumni evaluation graduation job offerings, university acceptance rate, school leaving rates, quality assessments, joint projects and activities.

Table 1. Balanced Scorecard for Educational Services

	Strategic Objectives	Performance Measures
Stakeholders perspective	Promote school image	Reputation ratio,, external rankings, alumni evaluation
	Parent satisfaction	Graduation job offerings, university acceptance rate
	Students loyalty	School leaving rates
	Increase quality of service	Quality assessments
	Encourage partnership with related institutions	Joint projects and activities
Internal processes perspective	Improve the student academic performance	Exam results of students
	To achieve improvement in teaching excellence	Budget spent on staff development
	Increase students participation to sport activities	Number of students attending the sport activities
	Increase students participation to social activities	Number of social activities
Learning and growth perspective	Improve staff satisfaction	Satisfaction surveys
	Technology implementation	Number of courses using new technology
	Knowledge enhancement	Number of seminars attended
Financial Sustainability Perspective	Improve Cost Structure	Saving in cost of service
	Increase Asset Utilization	Efficient use of facilities and resources
	Expand Revenue Opportunities	Level of student enrollment Fund raising from stakeholders

Conclusion

The main purpose of performance measurement and management in educational institutions is to increase accountability, handle with changing environmental and compete with the other institutions. As competition in educational services has become more intense, many educational institutions invested in education in order to achieve their goals. In order to ensure educational institutions to deliver their main mission, they should measure whether they have achieved their strategic objectives or not. In line with this purpose, many aspects were explored about the BSC in literature and it can be claimed that there are much to be discovered about it. Although the BSC has been implemented in developed countries for many years, especially in business sector, it has not until recently brought relevant sectors' attention on BSC theory and BSC has rarely been applied especially in educational institutions in Turkey. Therefore, this study verifies that BSC is a performance management system and a strategic management tool to achieve institutions goals. In this study we state that, by emphasizing missions and visions in educational institutions, schools can learn from business and pay more attention to educational costs and benefits in implementing performance management.

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